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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,326	12/12/2003	Sladjana Petrovic	38898-0059	9081
23577	7590	11/09/2007		
RIDOUT & MAYBEE SUITE 2400 ONE QUEEN STREET EAST TORONTO, ON M5C3B1 CANADA			EXAMINER JOHNSON, CARLTON	
			ART UNIT	PAPER NUMBER
			2136	
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			11/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/733,326

Applicant(s)

PETROVIC, SLADJANA

Examiner

Carlton V. Johnson

Art Unit

2136

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on 8/31/2007 has been entered.

2. This action is responding to application papers filed 8-31-2007. Claims **1 - 34** are pending. Claims **1, 13, 23** are independent.

Response to Arguments

3. Applicant's arguments filed 8/31/2007 have been fully considered but in view of the new grounds of rejection are moot.

Applicant's Arguments:

3.1 Applicant argues that the referenced prior art does not disclose, *"redirecting a request from a first server to a second server (a login server), but does not appear to disclose that the redirecting includes transmitting a session token to a second server as required by claim 1"*. (see Remarks Page 2) ; *"the transmission of a session token from a first server to a second server"* ; *"a first request handler transmitting a session token,*

Art Unit: 2136

received along with a request, to a second server" (see Remarks Page 3); "computer executable instructions for transmitting a session token, received along with a request, to a second server" ; (see Remarks Page 4) ; "a first request handler transmitting a session token, received along with a request, to a second server" (see Remarks Page 5) ; "Since it is submitted that Williams does not suggest or disclose transmitting a session token, received along with a request, to a second server, it is further submitted that the method of claim 1 is not anticipated by Williams." (see Remarks Page 3)

The Williams prior art discloses the capability to redirect a request from one server to a second server. (see Williams paragraph [0067], lines 12-18: redirection of session token and session information) And, the Williams and Wood combination discloses the capability to transmit a session token at the same time as a redirect request is transmitted between the first and second (server) systems. (see Wood paragraph [0044], lines 8-14; paragraph [0051], lines 1-3: session token with redirection request)

3.2 Applicant argues, *"Bachman does not suggest or disclose transmitting a session token to a second server" (see Remarks Page 4) ; "Bachman does not suggest or disclose a first request handler transmitting a session token, received along with a request, to a second server" (see Remarks Page 5) ; "Bachman does not suggest or disclose computer executable instructions for transmitting a session token, received along with a request, to a second server" (see Remarks Pages 5)*

Bachman is not utilized to reject this particular claim limitation. The specific claim limitation(s) Bachman is utilized to reject are stated in the Office Action.

3.3 Applicant argues that the referenced prior art does not disclose, *"If the first server and the second server of claim 1 share or synchronize cryptographic keys, then there is no requirement for the first server to decrypt an encrypted session token, received with a request, before transmitting the session token to the second server as required by Claim 1."* (see Remarks Page 3)

There is no disclosure within the claimed invention to share or synchronize cryptographic keys.

3.4 Specification does not disclose a definition for a web farm. Specification mentions that a web farm contains two (or more ?) servers and a database for session information storage. Therefore, the standard definition for a web farm is applied. A web farm is defined as, *"A Web server farm, or Web farm, refers to either a Web site that runs off of more than one server "*.

(http://www.webopedia.com/TERM/S/server_farm.html) The Williams prior art discloses an equivalent distributed data processing system as a web farm. The Williams prior art discloses multiple server systems utilized to process requests (perform requested services) from multiple client systems. (see Williams paragraph [0036], lines 3-4; paragraph [0037], lines 16-19: multiple servers, multiple clients)

The Williams prior art discloses a database for the storage of session management information. (see Williams paragraph [0037], lines 10-12; paragraph [0075], lines 12-16: database, storage). In addition, the Williams prior art discloses the capability to redirect service requests from one server to another server. A service request (despite login

request, a service request is still processed) is redirected to a second server for service completion. (see Williams paragraph [0067], lines 12-18: redirection of session token and session information, redirection request for resources)

The Williams prior art discloses a system and a method for secure session management within a collection of web server systems (web farm) using a session token. The claim limitations disclose that the token is renewed after each use. (see Specification Page 2, Paragraph [0006], lines 7-9). A session management web service updates the session token with each request received from a browser. (see Williams paragraph [0016], lines 7-13; paragraph [0016], lines 4-7: generate new encrypted session token and transfer) If the request must be redirected to a new server where the requested resource is located (see Williams paragraph [0067], lines 12-18: redirection of session token and session information, redirection request for resources) then the decrypted session token is transmitted to the new server (see Wood paragraph [0044], lines 8-14; paragraph [0051], lines 1-3: session token with redirection request) and the session management web service generates a new session token to be used in place of the previous session token. The new session token is transmitted to the browser with the requested web resource.

The Williams prior art discloses server(s) utilized for authentication and session token(s) generation. The Williams prior art discloses the capability for session tokens to be encrypted and decrypted during session token processing. (see Williams paragraph [0051], lines 14-16: encryption/decryption utilized for security) Once client access

Art Unit: 2136

procedures are completed, Williams prior art processes service requests to access a required resource.

The Williams prior art discloses a web farm data processing system. The Williams prior art discloses storage capabilities, and the capability to redirect service requests. In addition, the Williams prior art discloses the capability to encrypt and decrypt a session token.

3.5 The examiner has considered the applicant's remarks concerning a system and method for secure session management in a web farm utilizing a session token, which is updated with each request received from a browser. The capability exists for the redirection of a request to a new server to locate the requested resource, and encryption/decryption of session token(s). Applicant's arguments have thus been fully analyzed and considered but they are not persuasive.

After an additional analysis of the applicant's invention, remarks, and a search of the available prior art, it was determined that the current set of prior art consisting of Williams (20030005118), Wood (20040210771) and Bachman (5,907,621) discloses the applicant's invention including disclosures in Remarks dated August 31, 2007.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary

Art Unit: 2136

skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims **1 - 6, 9 - 18, 21 - 28, 31 - 34** are rejected under 35 U.S.C. 102(e) as being unpatentable over **Williams et al.** (US PG PUB No. **20030005118**) in view of **Wood et al.** (US PG PUB No. **20040210771**).

Regarding Claims 1, 23, Williams discloses a method, computer program product of secure session management for a web farm, the web farm including a first server and a second server, the second server having a requested web page, the method comprising the steps of:

- a) receiving, at the first server, a request for the requested web page from a browser, said request including an encrypted session token; (see Williams paragraph [0019], lines 1-5: request processing; paragraph [0016], lines 1-4; session token; paragraph [0050], lines 10-16; paragraph [0051], lines 14-16: encryption utilized for security; paragraph [0016], lines 1-4: software implementation, program product)
- b) decrypting said encrypted session token at the first server to obtain a session token; (see Williams paragraph [0020], lines 8-11: validate (must decryption required to process encrypted information) session information, process encrypted session information; paragraph [0016], lines 1-4: software implementation, program product)
- d) verifying said session token. (see Williams paragraph [0020], lines 8-11; paragraph [0074], lines 7-11: validate session token information, client and

session identification information; paragraph [0016], lines 1-4: software implementation, program product)

Williams discloses wherein redirecting said request to the second server. (see Williams paragraph [0067], lines 12-18: redirection of session information) Williams does not specifically disclose including transmitting said session token to the second server in a redirect request.

However, Wood discloses:

c) including transmitting said session token to the second server; (see Wood paragraph [0044], lines 8-14; paragraph [0051], lines 1-3: session token with redirection request)

It would have been obvious to one of ordinary skill in the art to modify Williams as taught by Wood to enable the capability for including transmitting said session token to the second server. One of ordinary skill in the art would have been motivated to employ the teachings of Wood in order to enable the capability to upgrade session credentials and maintain session continuity. (see Wood paragraph [0016], lines 11-16: “ ... *The session upgrading means upgrading the session by obtaining and authenticating a second credential to allow access to the target information resource if the first authenticated credential is inconsistent with the trust level requirement. The session upgrade means maintains session continuity across credential upgrades. ...* ”)

Regarding Claims 2, 24, Williams discloses the method, computer program product claimed in claims 1, 23, further including steps of creating a new session token, encrypting said new session token at the second server to produce a new encrypted session token, and transmitting a response to said browser from the second server, wherein said response includes said new encrypted session token. (see Williams paragraph [0016], lines 7-13; paragraph [0016], lines 4-7: generate new encrypted session token and transfer; paragraph [0016], lines 1-4: software implementation, program product)

Regarding Claims 3, 5, 15, 17, 25, 27, Williams discloses the method, system, computer program product claimed in claims 2, 13, 14, 23, 24, wherein said session token includes a session ID and a timestamp, and wherein said step of creating a new session token includes generating a new session ID and updating said timestamp. (see Williams paragraph [0062], lines 9-16; paragraph [0050], lines 1-5: session token, session ID and timestamp; paragraph [0016], lines 1-4: software implementation, program product)

Regarding Claims 4, 16, 26, Williams discloses the method, system, computer program product claimed in claims 2, 14, 24, further including a step of updating a common session database by replacing said session token with said new session token in said common session database. (see Williams paragraph [0069], lines 9-15: database for session token information storage paragraph [0016], lines 1-4: software

implementation, program product)

Regarding Claims 6, 18, 28, Williams discloses the method, system, computer program product claimed in claims 5, 17, 27, wherein a common session database contains a stored session ID and a stored timestamp, and wherein said step of verifying includes comparing said session ID and said timestamp with said stored session ID and said stored timestamp. (see Williams paragraph [0069], lines 9-15: database for session token information storage; paragraph [0062], lines 9-16; paragraph [0050], lines 1-5: session token, session ID and timestamp; paragraph [0020], lines 8-11: verification session information paragraph [0016], lines 1-4: software implementation, program product)

Regarding Claims 9, 21, 31, Williams discloses the method, system, computer program product claimed in claims 1, 13, 23, wherein said step of transmitting includes incorporating said session token into a URL. (see Williams paragraph [0044], lines 8-12: URL processing techniques utilized paragraph [0016], lines 1-4: software implementation, program product)

Regarding Claims 10, 32, Williams discloses the method, computer program product claimed in claims 1, 23, wherein a session management web service performs said step of verifying, said session management web service being accessible to said first server and said second server, and wherein said step of verifying includes comparing said

Art Unit: 2136

session token with stored session data. (see Williams paragraph [0020], lines 8-11: session information verification paragraph [0016], lines 1-4: software implementation, program product)

Regarding Claims 11, 33, Williams discloses the method, computer program product claimed in claims 10, 32, wherein the web farm further includes a common session database containing said stored session data. (see Williams paragraph [0013], lines 5-9; paragraph [0036], lines 3-4: web farms, set of interconnected web servers paragraph [0016], lines 1-4: software implementation, program product)

Regarding Claims 12, 22, 34, Williams discloses the method, system, computer program product claimed in claims 1, 13, 23, wherein said requested web page includes a web resource selected from the group including an applet, an HTML page, a Java server page, and an Active server page. (see Williams paragraph [0044], lines 3-8; paragraph [0042], lines 8-15: protected resource, a HTML web page paragraph [0016], lines 1-4: software implementation, program product)

Regarding Claim 13, Williams discloses a system for secure session management, the system being coupled to a network and receiving a request for a requested web page from a browser via the network, the request including an encrypted session token, the system comprising:

- a) a first server including a first request handler for receiving the request and decrypting the encrypted session token to produce a session token; (see Williams paragraph [0013], lines 5-9; paragraph [0050], lines 10-16: multiple servers, encrypted; paragraph [0020], lines 8-11: validate (i.e. must decrypt in order to process) session information)
- b) a second server including the requested web page; (see Williams paragraph [0013], lines 5-9: multiple servers; paragraph [0044], lines 3-8; paragraph [0042], lines 8-15: resource requested, a HTML web page)
- c) a common session database including stored session data; (see Williams paragraph [0069], lines 9-15: database for session token information storage) and
- d) a session management web service, accessible to said first server and said second server and including a validation component for comparing said session token with said stored session data; (see Williams paragraph [0020], lines 8-11: session verification information)

Williams discloses wherein said first request handler redirects the request to said second server. (see Williams paragraph [0067], lines 12-18: redirection capabilities)

Williams does not specifically disclose whereby transmits the session token to said second server as part of redirected request.

However, Wood discloses:

Art Unit: 2136

e) transmits the session token to said second server. (see Wood paragraph [0044], lines 8-14; paragraph [0051], lines 1-3: session token with redirection - request)

It would have been obvious to one of ordinary skill in the art to modify Williams as taught by Wood to enable the capability for including transmitting said session token to the second server. One of ordinary skill in the art would have been motivated to employ the teachings of Wood in order to enable the capability to upgrade session credentials and maintain session continuity. (see Wood paragraph [0016], lines 11-16)

Regarding Claim 14, Williams discloses the system claimed in claim 13, wherein said session management web service includes a token generator for creating a new session token for said second server, and wherein said second server includes a second request handler, said second request handler encrypting said new session token to produce a new encrypted session token and transmitting a response to said browser, wherein said response includes said new encrypted session token. (see Williams paragraph [0016], lines 7-10; paragraph [0016], lines 4-7: new session token generated and transferred; paragraph [0050], lines 10-16; paragraph [0051], lines 14-16: encrypted session token information)

6. Claims **7, 8, 10, 20, 29, 30** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Williams-Wood** and further in view of **Bachman et al.** (US Patent No. **5,907,621**).

Regarding Claims 7, 19, 29, Williams discloses the method, system, computer program product claimed in claims 5, 17, 27. (see Williams paragraph [0050], lines 1-5 : time parameter usage and processing paragraph [0016], lines 1-4: software implementation, program product) Williams does not specifically disclose a time out processing capability. However, Bachman discloses wherein including a step of determining whether a session has timed out, said step of determining including determining an elapsed time between said timestamp and a current server time, and comparing said elapsed time with a predetermined maximum time to determine whether said session has timed out. (see Bachman col. 1, lines 65-67: session management; col. 4, lines 11-17; col. 6, lines 10-19: process time out condition)

It would have been obvious to one of ordinary skill in the art to modify Williams as taught by Bachman to enable the capability to process a time period expiration condition. One of ordinary skill in the art would have been motivated to employ the teachings of Bachman in order to enable the capability to create a secure communications session between server and client systems and avoid distracting the client with the placement of token information within the page. (see Bachman col. 1, lines 65-67: “ ... *An advantage of the present invention is that a secure user session can be established between an internet server and a browser at an unsecured client.* ...

Art Unit: 2136

“; col. 2, lines 15-17: “ ... *To avoid distracting the user, the token is carried in a field of the page that is normally not displayed in the presentation space.* ... ”)

Regarding Claims 8, 20, 30, Williams discloses the method, system, computer program product claimed in claims 7, 19, 29. (see Williams paragraph [0050], lines 1-5: time parameter usage and processing paragraph [0016], lines 1-4: software implementation, program product) Williams does not specifically disclose a time out processing capability. However Bachman discloses wherein includes a step of closing said session if said session has timed out. (see Bachman col. 1, lines 65-67: session management; col. 4, lines 11-17; col. 6, lines 10-19: process time out condition, session erased, closed)

It would have been obvious to one of ordinary skill in the art to modify Williams as taught by Bachman to enable the capability to process a time period expiration condition. One of ordinary skill in the art would have been motivated to employ the teachings of Bachman in order to enable the capability to create a secure communications session between server and client systems and avoid distracting the client with the placement of token information within the page. (see Bachman col. 1, lines 65-67; col. 2, lines 15-17)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlton V. Johnson whose telephone number is 571-

Art Unit: 2136

270-1032. The examiner can normally be reached on Monday thru Friday , 8:00 - 5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Moazzami can be reached on 571-272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Carlton V. Johnson
Examiner
Art Unit 2136

NASSER MOAZZAMI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100


CVJ

October 29, 2007


11/6/07